

PROJECT TITLE: COMMUNITY-BASED CONSERVATION AND RESTORATION OF RIO DEL REY WETLANDS

1. Executive summary

Project name: Community-Based Conservation and restoration of Central Africa coastal wetlands

Project location : The project is planned to be located in non degraded and degraded wetlands of Rio Del Rey Estuary in Cameroun.

Project length and dates: Three (3) years, i.e. 36 months (from January 2014 to December 2016)

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Statement of project goal: The Goal of the project is to support community-based conservation and wise use in non degraded wetland areas and to rehabilitate degraded coastal wetlands in Central Africa in order to safeguard their ecosystem's goods and services, and mitigate climate change.

Names of project proponents and main project implementing organisations: IUCN, Cameroon Program will be the main implementing organization partnering with Cameroon Mangrove network/Cameroon Wildlife Conservation Society (Cameroon), very active on the ground.

Total project cost: The total budget of the project is: 1 424 525 Euros

Amount of funding being requested from GDI: 924 525 Euros

Amount of funding being provided from elsewhere: 500 000 Euros

2. Area Characteristics

The project is planned to be located in non degraded and degraded wetlands of Rio Del Rey Estuary, in Cameroon.

The Rio del Rey is situated in a landscape of the hottest biodiversity spots of Cameroon, downstream from Cross River, Korup and Takamanda forests, in the shadow of Mt Cameroon and in the wettest corner of Africa with 4 – 10 meters of annual rainfall. the Rio Del Rey Estuary is a transboundary site between Cameroon and Nigeria and it hosts approximately 10% of all West African mangroves and half of Cameroon's mangroves. The Rio Del Rey mangroves are a uniquely important habitat for endemic and threatened species such as the Giant frog, *Conraua goliath*, the West African manatee (*Trichechus senegalensis*) and the Dwarf crocodile (*Osteolaemus tetraspis*). It also offers a staging area for the migratory Lesser flamingo (*Phoeniconaias minor*) and for the Rachel's Malimbe (*Malimicus racheliae*). The estuary provides crucial ecosystem services. This highly diverse site has a great biological importance as it hosts a spawning ground and nursery path for fish stocks and has a high hydrological value through recharge and discharge of underground water. These are amongst the most intact and best conserved mangrove forests on the African coast. It lies in a presently remote and undeveloped area of the Cameroon coast, it has a number of oil palm plantations at its periphery, and there are no important roads or other infrastructures crossing this area and only small human settlements. Since the 1960s mainly off-shore oil exploitation, accounting for over 70% of Cameroon's oil production, has been the most important economic activity off the Rio del Rey coast. The area includes Bakassi Peninsula that was recently included in the Cameroonian territory. There is a large potential for more oil and gas exploitation in this important biodiversity hotspot. The area is sparsely populated by such ethnic groups from Nigeria and Cameroon who share same traditions, culture and with regular inter marriages. The Ejaghams and the Efiks are majority tribal groups in the region with 70% of population of the later coming from Nigeria. The main activities are fisheries, fish smoking including exploitation of and trade in other non timber forest products such as bush mangoes and illicit gin. The main markets are the Nigerian town of Calabar with a population of about 2 million, Ekondo Titi, Kungo Idimo and to some extent Mundemba in Cameroon with in total an estimated population of about 300,000 inhabitants.

3. Area Manager

3.1. Contact details

Name	Contact details	Role/responsibility
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3.2. Summary information on the organisation and organisation structure

IUCN (International Union for Conservation of Nature) is an International Non Governmental Organization, founded in 1948. It helps the world find pragmatic solutions to our most pressing environment and development challenges. It supports scientific research, manages field projects all over the world and brings governments, non-governmental organizations, United Nations agencies, companies and local communities together to develop and implement policy, laws and best practices. IUCN vision is a just world that values and conserves nature. Its mission is to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.

Cameroon Mangrove Network (CMN) (Registration No.61 RDA/C18/BAPP of 09/05/2005) is a network of over 39 grassroots national NGOs and CBOs involved in sustainable mangrove and coastal area management issues in Cameroon. Its secretariat is hosted by **Cameroon Wildlife Conservation society (CWCS)**, a national NGO. CMN operates within a wider regional network, the African Mangrove Network (AMN) with 22 member countries in Africa. The CMN's mission is to set up and run a **framework of exchange and joint action** with grassroots mangrove NGOs and CBOs for sustainable management of mangrove forests within the context of integrated coastal area management. Its Global objective is to conserve, manage and promote sustainable exploitation of mangrove and coastal resources in order to meet local and national needs of the present and future generations.

3.3. Overview of relevant expertise and experience

Over the past ten years, a number of national NGOs in the different countries and project sites have worked with local communities, fishermen and women to develop participatory approaches to mangroves management and wise use.

IUCN works in Central Africa since 1995 and has carried out various projects in different sectors namely Water and Wetlands, Forest Conservation, Governance and policy issues, Coastal and marine ecosystem, and Protected Area. IUCN hosts actually a number of programmes and projects among which the Water and Wetlands programme, the REDD project, etc. IUCN has across the West and central Africa region a wide range of expertise and experience on Wetlands management. IUCN develops and implements projects on community management and mangrove ecosystems conservation. In this way, many tools were tested and disseminated to benefit local communities and administration. IUCN has submitted to International Tropical Timber Organisation (ITTO) a project on sustainable management of Mangrove's ecosystems in

Cameroon which is expected to start by the end of 2013.

With support from IUCN and other partners, CWCS created in 1994 has become the leading national conservation NGO with over 13 years of field experience in coastal Atlantic forest, mangroves and wetlands management. In collaboration with Wetlands International and Mangrove Action Projects – USA, CWCS has established a regional Central/West African national NGOs network on mangroves and wetlands management. CWCS currently hosts the Cameroon Mangrove Network's secretariat. CWCS has also developed innovative energy saving fish smoking techniques which have been widely vulgarized in the region. This includes introduction of fuel efficient fish-drying stoves, elaboration of simple mangrove management and zoning plan within the Douala-Edea that includes mapped: mangrove wood collection zone, mangrove green-shields, mangrove biomass monitoring blocks, mangrove reforestation and regeneration areas, and settlement & development zones. The plan is further implemented with strict rules set up and implemented by Community Mangrove Management Committee (COPCVAM) headed by the Distinct Officer. There is also useful experience with reforestation of over 25 ha of degraded mangrove forests along the Sanaga Delta.

3.4. Project Implementation

IUCN Cameroon Program is the Main implementing organization for this project. It will rely on local NGO partners which is CWCS in this case, to implement field activities. All activities will be carried out in collaboration of the local administration and authorities. The traditional leaders and Community Based organizations as targets group will fully be involved in the planning and implementation of activities.

4. Rapid assessment and analysis

4.1. Historical status as a functioning wetland

Wetlands in the sub-region are undergoing various levels of degradation including outright losses in certain cases due to unsustainable use of wetlands resources. Mangroves within these RAMSAR sites have been lost at the rate of 32.2 % from 1980 and 2006, giving an annual loss of 1.2%. The major driving forces are population growth, socio-economic development, petroleum/gas exploration and exploitation. Data to establish those trends were obtained through remote sensing techniques, consultation of experts and literature surveys.

4.2. Current degraded or threatened status of the wetland

Several factors contribute to the degradation of mangroves in Cameroon. These include among others urbanization, urban infrastructure development, extraction of salt and sand quarries, pollution from industries, chemicals, agro-industries, infrastructure development for the exploitation of oil and gas, lack of appropriate institutions (lack of coordination between different sectoral ministries and actors) and legal framework, mangrove wood cutting for fish smoking and houses construction, the spread of invasive species, and the effects of climate change exacerbated by population growth.

Forms of degradation: (i) the total destruction by urban development, the development of aquaculture, mining or farming, (ii) the disturbance by the alteration of water flows and salt content soft through the construction of roads, pipelines, dredging, water, etc. (iii) degradation by exploitation of timber and / or fishery resources, (iv) degradation by pollution.

4.3. Direct and underlying threats and causes of degradation

Although located at a distance from agricultural projects such as oil palm plantations, or exploitation of petroleum, these mangroves are located in one of the most remote areas currently under anthropogenic activities, and the Cameroon coast.

The past developments (the Douala-port and town developments & extensions and, the allocation of large tracks of land to agro-industrial developments at the fringes of the mangrove forest and inside the coastal zone) are nothing compared to the large development projects that are being planned in the coastal zone of Cameroon.

- The Bakassi Peninsula (with a presently largely Nigerian population) is being integrated into the Cameroonian development spheres, with a likely influx of people into this remote and sparsely populated area, the construction of a national road traversing the coastal and mangrove forests.
- There will be large new oil exploration and exploitation developments, mostly off-shore, in the larger Rio del Rey (including Bakassi) area.

In addition, invasive species such as the Nypa palm, constitute a threat to the wetland

4.4. Overview of any previous or on-going restoration initiatives, in addition to the planned project

Various wetlands restoration activities have been embarked at various scales by actors in different wetlands in Cameroun. Across the region, Cameroon seems to take the lead in mangrove restoration efforts.

For the Rio Del Rey area, WWF carried out some basic studies to gather baseline data necessary to create the National Park Ndongoré which should cover nearly 233 000 ha and include marine areas and mangroves.

Specific restoration activities have not being carried out in this area. Nevertheless, outreach sensitizations are currently carried out for the government and local communities.

Anticipative actions should be taken, to prevent this special area from the type of degradation known in Cameroon Estuary.

4.5. Wetland stakeholders

The stakeholders' situation on the selected wetlands types are shown in this.

Table 1: Stakeholders analysis of selected project areas

Stakeholder group	Nature of wetland relationship (also list goods and services)	Estimated group size
1. Government	Insurance of sustainable exploitation and management of wetlands resources through the application of laws by various Ministries services (Facilitation, Control, etc.)	Various Ministries are working in sectors like: Fishery, Environment, Forestry and wildlife, Industry, Mine and power, etc.
2. Local communities	Extracting the goods and services offered by the wetlands especially fisheries, constructing materials, etc	Over 200 000 people are estimated to leave directly in all these sites.
3. Conservation NGOs and donors community	Promoting sustainable management Conservation and wise use of wetlands resources	At least five NGOs and CBO are found per site.

5. Work plan for planning and registration

5.1. Annual Work plan

	Year 1											
	Months											
	1	2	3	4	5	6	7	8	9	10	11	12
Result 1: An Effective multi-stakeholders institutional collaborative framework is established for community-based wetlands conservation or rehabilitation at targeted areas												
Activity 1: Organise and conduct consultative committee meetings												
Activity 2: Strengthen material and operational capacities of targeted NGOs in Rio Del Rey Area												
Activity 3: Prepare and sign MoUs if necessary with key implementing stakeholders (M ministries, councils, schools, churches, universities, local NGOs and CBOs, private sector, etc)												
Activity 4: Organize project launching workshop with key stakeholders												
Result 2: Relevant project Baseline-scenario data or information are available, and an operational system for monitoring												

project achievement with feasibilities for REDD and CDM schemes is put in place										
Activity 1: Undertake GIS mapping of Rio Del Rey areas with potential threats to the ecosystems and area needed for reforestation										
Activity 2: Conduct complementary socio-economic surveys of villages Rio Del Rey										
Activity 3: Elaborate an effective Environmental and social impact monitoring and assessment tools and mechanisms for implementation										
Activity 4: Produce a participatory mangrove land use map (PMLUM)										
Result 3: Degraded and fragmented mangroves forest Rio Del rey are re-afforested in a participatory approach										
Activity 1: Develop in the area a system for <i>Rhizophora sp</i> propagule collection and for <i>Avicennia germinans</i> seed collection and establish nurseries for mangrove species										
Activity 2: Outplant seedlings of <i>Avicennia germinans</i> and propagule in the degraded identified mangrove blocks										
Activity 3: Monitor planted propagules and seedlings										
Activity 4: Management of plantations installed										
Result 4: Ecological integrity of the Ramsar sites maintained and strengthened through effective management										
Activity 1: Raise awareness of local community and governments about major threats on the Rio Del Rey area										
Activity 2: capacity building of local community to organise themselves, in order to put on place platforms for dialogue and actions										
Activity 3: trained leaders on technical mangrove conservations and on advocacy										
Activity 4: support the production of Management Plan of Rio Del Rey										
Result 5: Capacity of member's NGOs are reinforced for relevant actions to the rehabilitation of degraded wetlands and for the limitation of the degradation of wetlands										
Activity 3: organise village on-field training workshops on mangrove seed collection regeneration and planting										
Activity 3: organise -field training workshops with primary and secondary schools in rural and peri-urban areas on mangrove seed collection regeneration and planting										
Activity 3: organise cross site exchange capacity building visits										

5.2. Estimate of total project cost

ESTIMATE OF PROJECT COST (Euros):

	Preparation	Project Coordination (IUCN)	Rio Del Rey Component	Total
Detailed budget for the inception phase				
International consultant	17 000			17 000
National consultants	12 000			12 000
Meetings and workshops	10 000			10 000
Running cost	5 000			5 000
Total Preparation	44 000			44 000
Summary budget estimate for full project				
Capital and Equipment		15 000	50 000	65 000
Other Materials and inputs		5 000	70 000	75 000
Transport and travel		10 000	20 000	30 000
Staffing		125 000	300 000	425 000
Surveys and research		25 000	10 000	35 000

Local and international consultant		20 000	0	20 000
Workshops and meetings		30 000	10 000	40 000
Training and awareness	0	15 000	1 500	16 500
Office running		10 000	30 000	40 000
Monitoring and evaluation		10 000	0	10 000
3 rd party costs and community services		0	50 000	50 000
Verification and certification work		30 000	0	30 000
TOTAL Implementation phase	0	295 000	541 500	836 500
Contingency (5%)	2 200	14 750	27 075	44 025
Budget of IUCN & CMN tree planting project			500 000	500 000
Grand total	46 200	309 750	1 068 575	1 424 525

5.3. Total GDI investment sought

The funding to be sought from GDI is 924 525 Euros

6. Biodiversity-Positive Outcomes

6.1. Goals, objectives and projected outcomes of the project in the following areas:

The Goal of the project is to support community-based conservation and wise use in non degraded wetland areas and to rehabilitate degraded coastal wetlands in Central Africa in order to safeguard their ecosystem's goods and services, and mitigate climate change; the case of Rio Del Rey Ramsar site.

Objectives:

- Reinforcing institutional framework and mobilizing institutions at local, national and sub-regional levels for their effective participation and ownership of the project;
- Carrying out baseline-scenario data collection and information for monitoring project achievements with feasibilities for REDD and CDM schemes ;
- Carrying out on ground grassroots tree planting actions of predominant mangrove species (*Rhizophora* and *Avicennia*) and coastal species (*Fegimanra Africana*, *Annona glabra*, etc.) in rural and peri-urban degraded areas, and expansion of vegetation cover in potential sites;
- Providing support to suitable biodiversity conservation actions in well conserved sites and in potential Ramsar sites;
- Providing support for CBO capacity building actions relevant to the rehabilitation of degraded wetlands and for the limitation of the degradation of wetlands.
- Sharing lessons learnt across the coastal zones of the Congo Basin through participation to national and regional workshops/seminars

Projected anticipated outcomes:

- An effective multi-stakeholders institutional collaborative framework is established for community-based wetlands conservation or rehabilitation at targeted areas ;
- Relevant project Baseline-scenario data or information are available, and an operational system for monitoring project achievement with feasibilities for REDD and CDM schemes is put in place ;
- Degraded and fragmented mangroves forest in selected sites from Cameroon, Gabon, Equatorial Guinea, Congo, and DRC are re-afforested, with support from Cameroon Mangrove Network's experience (At least 7000 hectares of stable tidal areas are re-afforested within the region, and at least 13,000 hectares of degraded mangrove are restored with the participation of local communities);

- Ecological integrity of classified and potential Ramsar sites maintained and strengthened through effective management (Relevant actions for effective management or for monitoring the conservation effectiveness of Protected areas or RAMSAR sites are identified and supported);
- Capacity of member's NGOs are reinforced for relevant actions to the rehabilitation of degraded wetlands and for the limitation of the degradation of wetlands;
- Lessons learnt on community-based conservation or reforestation of degraded wetlands and associated forests are disseminated across the coastal zones of the Congo Basin.

Impacts of the project:

- **Carbon impact:** Mangrove trees are generally defined as those that grow in saline (salty) coastal areas. They act as carbon sink that sequester and store carbon dioxide from the atmosphere to their plant tissues. The conservation or the rehabilitation of mangrove vegetation is then a cost-effective tool to fight the global warming phenomenon. The limitation of the degradation or the total area reforested and restored will come up with a good carbon credit volume that can be collectively granted to DANONE.
- **Community impact:** Threats to wetlands are among other the degradation of mangrove trees through deforestation, degradation of fisheries through unsustainable fishing practices, decreasing of wetland goods and services, etc. The project will address and overcome those threats by taking care of technical aspects, organizational aspects and suitable institutional arrangements. Some areas could be transformed into areas conducive for marine organisms to flourish. Ecotourism can be developed in the area to generate income for the local population. Mangrove reforestation will also benefit as an important nursery for fishes and crustaceans of commercial value. Mudcrab farms will be put in place in appropriate area, which gives occasional employment to some people in the community.
- **Wetland Impact:** Working for the gazettelement of new RAMSAR sites and insuring effective management of gazetted RAMSAR sites is a means of insuring the conservation of wetlands functions. The restored and preserved area will allow multiplication of avian (bird) community as they find the mangrove plantation a source of food and a nesting place.

6.2. Major assumptions, risks and threats to achieving outcomes

Key Risks to achieving the expected outcomes:

- Lack of local community participation is one aspect in the sense that the reforested area can be devastated again if they are not fully involved in the project and if they don't see any immediate benefit.
- The incoherence and weakness of the institutional and legal framework to support meaningful dialogue with all stakeholders is another aspect.
- The involvement of different administration in charge can also be seen as critical for the project. This is important because in the field, many administrations are working often without clear collaboration.
- Weak capacity of local NGOs to implement the project and manage the financial resource effectively.
- Conflicting interests over land use lead to ineffective cross sector dialogue and collaboration.
- Major marine-pollution incidents, resulting particularly from petrol/oil exploitation in the waters of some countries, or even discharges from onshore facilities.
- Advancing climate change and sea level rise will impact the health and resilience of coastal ecosystems

Major assumptions made in relation to the design of the project outcomes

- We should make sure that the local communities are involved not only as workers for the project but also as owners and beneficiaries of wetland products and services.

- The success of the project should rely on the quality of the institutional and legal framework and its capacity of involving the various stakeholders.
- The coordination and communication about the role of different administration involved in the management of wetland resources is important.
- The capacity building of local NGOs to implement the project and manage the financial resource is effective.
- A suitable dialogue and collaboration mechanism is in place.
- Marine-pollution incidents is minimized
- Coastal ecosystems are effectively managed for the improvement of their resilience toward the climate change.

6.3. Project summary matrix

Objectives	Outcomes	Activities	Deliverable outputs
Reinforcing institutional framework and mobilizing institutions at local, national and sub-regional levels for their effective participation and ownership of the project	An effective multi-stakeholders institutional collaborative framework is established for community-based wetlands conservation or rehabilitation at targeted areas	<ul style="list-style-type: none"> • Organise and conduct consultative committee meetings ; • Strengthen material and operational capacities of targeted NGOs in Rio Del Rey; • Prepare and sign MoUs if necessary with key implementing stakeholders (Ministries, councils, schools, churches, universities, local NGOs and CBOs, private sector, etc); • Organize project launching workshop with key stakeholders 	<ul style="list-style-type: none"> -Framework for consultation; -Bills of physical items bought available; -Signed MoUs and agreements with key partners available -Workshop reports available with list of participated key stakeholders
Carrying out baseline-scenario data collection and information for monitoring project achievements with feasibilities for REDD and CDM schemes	Relevant project Baseline-scenario data or information are available, and an operational system for monitoring project achievement with feasibilities for REDD and CDM schemes is put in place	<ul style="list-style-type: none"> • Undertake GIS mapping of Rio Del Rey area with potential threats to the ecosystems and area needed for reforestation • Conduct complementary socio-economic surveys of villages in Rio Del Rey Area; • Produce a participatory mangrove land use map (PMLUM) 	<ul style="list-style-type: none"> -Technical document with maps showing mangrove degraded areas and potential threats to the area; - Technical document on Socio-economic status of Rio Del Rey; -Technical document with participatory land use map
Carrying out tree planting actions within mangrove degraded areas of countries grassroots using predominant mangrove species (<i>Rhizophora</i> and <i>Avicennia</i>) and other coastal species (<i>Fegimanra Africana</i> , etc.)	Degraded and fragmented mangroves forest in selected sites from Cameroon, Gabon, Equatorial Guinea, Congo, and DRC are re-afforested, with support from Cameroon Mangrove Network's experience	<ul style="list-style-type: none"> • Develop in the area a system for <i>Rhizophora sp</i> propagule collection and for <i>Avicennia germinans</i> seed collection and establish nurseries for mangrove species • Outplant seedlings of <i>Avicennia germinans</i> and propagule in the degraded identified mangrove blocks; • Monitor planted propagules and seedlings; • Management of plantations installed 	<ul style="list-style-type: none"> -At least 2 million <i>Rhizophora</i> propagules collected for direct planting -At least 2 million seeds of <i>Avicennia</i> & other rare mangrove species collected for nursery establishment -Over 1 000 ha of degraded wetland forests planted -Mangrove Data base available
Providing support to suitable biodiversity conservation actions in well conserved sites and in potential Ramsar sites	Ecological integrity of the Ramsar sites maintained and strengthened through effective management	<ul style="list-style-type: none"> • Raise awareness of local community and governments about major threats on the Rio Del Rey area • capacity building of local community to organise themselves, in order to put on place platforms for dialogue and actions • train leaders on technical mangrove conservations and on advocacy • support the production of Management 	<ul style="list-style-type: none"> -Draft management plan document available f

		Plan of Rio Del Rey	
Providing support for ONG capacity building actions relevant to the rehabilitation of degraded wetlands and for the limitation of the degradation of wetlands	Capacity of member's NGOs are reinforced for relevant actions to the rehabilitation of degraded wetlands and for the limitation of the degradation of wetlands	<ul style="list-style-type: none"> • Organise village on-field training workshops on mangrove seed collection regeneration and planting • Organise -field training workshops with primary and secondary schools in rural and peri-urban areas on mangrove seed collection regeneration and planting • Organise cross site exchange capacity building visits 	<p>Over 400 village communities participants</p> <p>Over 500 schools participants</p> <p>Cross site exchange reports available with names of participants</p>
Sharing lessons learnt across the coastal zones of the Congo Basin through a final regional workshop	Lessons learnt on community-based conservation or reforestation of degraded wetlands and associated forests are disseminated	<ul style="list-style-type: none"> • Publish posters ; • Disseminate lessons learnt in at least 3 workshops/seminars 	<p>Posters</p> <p>Report</p>

7. Letter of Support

See the attachment

8. Area Photos

Please see different attachments